COMMONWEALTH of VIRGINIA

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COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

USG Corporation
United States Gypsum Company - Norfolk Plant
Norfolk, Virginia
Permit No. TRO-60234

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, USG Corporation has applied for a Title V Operating Permit for its Norfolk, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Air Permit Writer:	Lindsey M. Evans (757) 518-2168	Date:	**October 28, 2014**
Regional Air Permits Manager:	Troy D. Breathwaite	Date:	**October 28, 2014**
Regional Director:	Maria R. Nold	Date:	**October 28, 2014**

FACILITY INFORMATION

Permittee
USG Corporation
550 West Adams Street
Chicago, Illinois 60661-3676

Facility
United States Gypsum Company - Norfolk Plant
1424 South Main Street
Norfolk, Virginia 23523

County-Plant Identification Number: 51-710-00068

SOURCE DESCRIPTION

NAICS Code: 327420 - Gypsum Product Manufacturing

The United States Gypsum Company is engaged in the manufacturing of gypsum wallboard and industrial gypsum products. An overview of the current manufacturing process is shown in process flow diagram Figure 2-1 of the Title V permit renewal application dated February 6, 2014. The current manufacturing operations feature the use of flash calcining hammer mills for grinding and heating gypsum in a single step to produce stucco (formerly, Raymond Mills were used for drying and grinding the gypsum prior to the application of heat in kettle calciners for the production of stucco).

The manufacturing process begins as gypsum ore (calcium sulfate dihydrate, $CaSO_4 \bullet 2H_2O$) is received by ship, unloaded, and stockpiled. The ore is screened and crushed to less than two inches in diameter and then conveyed to rock storage bins. The crushed gypsum is fed from the rock storage bins to one of two flash calcining hammer mills, where it is ground and heated so that three-quarters of the chemically bonded water is removed, producing stucco ($CaSO_4 \bullet 1/2H_2O$). Auxiliary burners produce hot combustion gases that directly heat the rock in the flash calciners. Stucco is discharged from the calciners and then conveyed to a stucco cooler and a stucco surge hopper.

In the manufacture of wallboard, stucco from the surge hopper is conveyed to the board stucco bin. Stucco from the storage bins is mixed with dry additives such as starch, paper fiber and fiberglass. The stucco and additive mixture is then screw conveyed to the board mixer, where it combines with foam and wet additives. The additives may include a moisture and mold resistant (MMR) additive, which is specified for certain products.

The stucco slurry discharges continuously from the mixer in between two sheets of paper, which serve as a mold. The stucco ($CaSO_4 \bullet 1/2H_2O$) combines with water in the slurry to form solid gypsum ($CaSO_4 \bullet 2H_2O$), resulting in rigid board. The board is rough cut to length and then dried by direct contact with hot combustion gases in a multi-zone kiln. The dried board is cut to final length at the end saw area and bundled for shipment.

The facility is a Title V major source of PM-10. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility is currently permitted under a State Operating Permit issued on May 19, 2009.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U100	S101	Calcining Hammer Mill #1 Burner (Natural Gas/Distillate Oil)	60 MMBtu/hr	CECOAIRE Grenzebach 310-120 Fabric Filter; 99% Control Efficiency	C105	PM, PM-10	May 19, 2009
U124		Calcining Hammer Mill #1 (NSPS OOO applicable)	60 tons/hr (Gypsum)				May 19, 2009
U101	S102	Calcining Hammer Mill #2 Burner (Natural Gas/Distillate Oil)	60 MMBtu/hr	CECOAIRE Grenzebach 310-120 Fabric Filter; 99% Control Efficiency	C106	PM, PM-10	May 19, 2009
U125		Calcining Hammer Mill #2 (NSPS OOO applicable)	60 tons/hour (Gypsum)				May 19, 2009
U102	S103	Drying Kiln Wet Zone Burner (Natural Gas/Distillate Oil)	100 MMBtu/hr	-	-	-	May 19, 2009
U103		Drying Kiln Dry Zone Burner (Natural Gas/Distillate Oil)	100 MMBtu/hr	-	-	-	May 19, 2009
U104		Drying Kiln Wet Zone End Seal Burner (Natural Gas)	2.5 MMBtu/hr	-	-	-	May 19, 2009
U105		Drying Kiln Dry Zone End Seal Burner (Natural Gas)	2.5 MMBtu/hr	-	-	-	May 19, 2009
U106	S104	HRA Landplaster Hammer Mill Burner (Natural Gas)	2.25 MMBtu/hr	C.P.E. 72CNFB025-TMC 49.8XL Fabric Filter; 99% Control Efficiency	C110	PM, PM-10	May 19, 2009
U130		HRA Landplaster Hammer Mill	3 tons/hr (Landplaster)				May 19, 2009
U107	S105	Mixer Hot Water Boiler (Natural Gas)	2.6 MMBtu/hr	-	-	-	May 19, 2009
U16	S7	Rock Crusher (NSPS OOO applicable)	150 tons/hour (Gypsum)	Flex Kleen 84-BVBS-25 II Fabric	C14	PM, PM-10	May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U36		Crushed Rock Belt (NSPS OOO applicable)	150 tons/hr (Gypsum and Gypsum Reclaim)	Filter; 99 % Control Efficiency			May 19, 2009
U31	-	Dark Rock Stock Pile	50,000 tons (Gypsum)	-	-	-	May 19, 2009
U33	-	420 Stock Pile	40,000 tons (Anhydrite Rock)	-	-	-	May 19, 2009
U34	-	2A Rock Stock Pile	9,000 tons (Anhydrite Rock)	-	-	-	May 19, 2009
U35	-	Gypsum Reclaim Stock Pile	120,000 tons (Gypsum Reclaim)	-	-	-	May 19, 2009
U43	S35	HRA Ball Mill #1	3 tons/hr (Landplaster)	Flex Kleen 84-BVBC-16 Fabric Filter; 99% Control Efficiency	C41	PM, PM-10	May 19, 2009
U45	-	Trommel Screen (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U46	-	Rock Hopper with Pan Feeder	150 tons/hr (Gypsum)	-	-	-	May 19, 2009
U47	-	Rock Incline Belt (NSPS OOO applicable)	150 tons/hr (Gypsum and Gypsum Reclaim)	-	-	-	May 19, 2009
U48	-	Reclaim Feeder (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U49	-	Reclaim Incline Belt (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U53	-	Ship Unloading Hopper with Pan Feeder	2,000 tons/hr (Gypsum)	USG Design Misting System (wet suppression); 60% Control Efficiency	C45	PM, PM-10	May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U54	-	Ship Unloading Conveyor System	2,000 tons/hr (Gypsum)	-	-	-	May 19, 2009
U121	S107	Grizzly Feeder (NSPS OOO applicable)	150 tons/hr (Gypsum)	Seneca 169FMTHS100 Fabric Filter; 99% Control Efficiency	C102	PM, PM-10	May 19, 2009
U122	S108	Calcining Hammer Mill Feed Bin #1 (NSPS OOO applicable)	150 tons/hr (Gypsum)	Flex Kleen 84-BVBS-14IIG Fabric Filter; 99% Control Efficiency	C103	PM, PM-10	May 19, 2009
U123		Calcining Hammer Mill Feed Bin #2 (NSPS OOO applicable)	150 tons/hr (Gypsum)				May 19, 2009
U127	S110	Stucco Cooler	100 tons/hr (Stucco)	Flex Kleen 120 WSTS 121 (111G) Fabric Filter; 99% Control Efficiency	C107	PM, PM-10	May 19, 2009
U128	S111	Stucco Storage Bin	1,200 tons (Stucco)	Seneca 100FMTHS100 Fabric Filter; 99% Control Efficiency	C108	PM, PM-10	May 19, 2009
U129	S112	Stucco Rotary Screen	105 tons/hr (Stucco)	Seneca 154FMTHS100 Fabric Filter; 99% Control Efficiency	C109	PM, PM-10	May 19, 2009
U135		Paper Fiber Mill	0.45 tons/hr (Paper)				May 19, 2009
U131	S113	HRA Landplaster Feed Bin	5 tons (Landplaster)	Seneca 20FMBV100 Fabric Filter; 99% Control Efficiency	C111	PM, PM-10	May 19, 2009
U132	S114	HRA Ball Mill #2	3 tons/hr (Landplaster)	Seneca 16FMBV100 Fabric Filter; 99% Control Efficiency	C112	PM, PM-10	May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U133	S116	Starch Storage Bin	175 tons (Starch)	Seneca 16FMBV100 Fabric Filter; 99% Control Efficiency	C114	PM, PM-10	May 19, 2009
U134	S117	Starch Refill Bin	5 tons (Starch)	Seneca 12FMBV45 Fabric Filter; 99% Control Efficiency	C115	PM, PM-10	May 19, 2009
U136	S118	End Saw	6 tons/hr (Gypsum Board)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C116	PM, PM-10	May 19, 2009
U137	S119	Dunnage System	6 tons/hr (Dunnage)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C117	PM, PM-10	May 19, 2009
U138	S120	Waste Shredder	50 tons/hr (Gypsum Board)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C118	PM, PM-10	May 19, 2009
U139	Various	Miscellaneous Conveying Equipment, Bins and Hoppers	Various	Various	Various	Various	May 19, 2009

Changes to the Equipment List:

The emission unit and pollution control equipment tables have been merged into one table for clarity. This is consistent with the formatting in the current Title V boilerplate.

The equipment unit table has been re-formatted to clarify which emission units share a common stack.

A reference to NSPS OOO has been included for units U16, U36, U45, U47, U48, U49, U121, U122, U123, U124, and U125.

The equipment description for unit U53 has been revised to match the description in the Title V renewal application dated February 6, 2014.

EMISSIONS INVENTORY

A copy of the 2012 emission report is attached. Emissions are summarized in the following tables.

2012 Actual Emissions

	2012 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO_2	PM_{10}	NO_x
U100-U103	5.53	7.97	0.13	5.89	7.75
U104-U107	0.08	1.01	0.007	0.17	1.21
U121-U125, U127-U139				34.61	
U16				0.28	
U43				0.00	
U36, U45, U47-U49				0.01	
U31-U35, U42				30.33	
Total	5.61	8.98	0.14	71.3	8.96

2012 Facility Hazardous Air Pollutant Emissions

Pollutant	2012 Hazardous Air Pollutant Emission in Tons/Yr
Formaldehyde	1.07

EMISSION UNIT APPLICABLE REQUIREMENTS - Fuel Burning Equipment Requirements - (U100, U101, U102, U103, U104, U105, U106, U107)

Limitations

The following limitations are derived from the State Operating Permit issued May 19, 2009:

Condition 1 (SOP Condition 9): Fuel
Condition 2 (SOP Condition 10): Fuel Throughput
Condition 3 (SOP Condition 11): Fuel
Condition 4 (SOP Condition 23): Facility Wide Fuel Burning Equipment Emission Limits

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80	Standard for Visible Emissions for New and Modified Stationary Sources
9 VAC 5-50-260	BACT Standard for New and Modified Stationary Sources

A reference to Conditions 1-3 and 5 has been included at the end of Condition 4 to clarify the conditions with which the source must demonstrate compliance in order to demonstrate compliance with the emission limits. Condition 4 has also been revised to include a reference to the requirement to track the annual throughput on a rolling 12-month basis (as required by Condition 2). This will help clarify the averaging time for the tons/yr limit and ensure compliance with the rolling 12-month throughput requirement. This change was made in response to comments from EPA Region III.

An additional visible emissions limitation has been included in Condition 5 for units U102, U103, U104, U105, and U107. These units are subject to the New Source Visible Emissions standard in 9 VAC 5-50-80. The June 19, 2006 NSR permit established opacity limits for the NSPS-applicable process units (Conditions 20, 21, and 22 of the Title V permit) as well as the non-NSPS-applicable process units that vent to a dust collector (Condition 19 of the Title V permit); however, opacity requirements for the fuel burning equipment units were not included. Units U100, U101, and U106 each share a stack with units U124, U125, and U130, respectively. As a result, the emissions are required to be controlled by a fabric filter baghouse, so the 5% opacity limitation in Condition 19 applies to these units. However, units U102-U105 and U107 do not vent to a dust collector, therefore, the 5% limit does not apply. The 20/30% new source opacity standard has been included for these units.

Monitoring

The source is required to obtain a certification from the fuel supplier with each shipment of distillate oil to demonstrate compliance with the fuel specifications in Condition 3.

Periodic monitoring requirements for units U102 and U103 have been included in Condition 7. These units are large burners (100 MMBtu/hr each) which burn natural gas with distillate oil as a back-up fuel. The source has indicated that, while it would like to maintain the flexibility to use distillate oil as a backup fuel, units U102 and U103 are currently operating on natural gas and have never burned distillate oil. No visible emissions are expected from these units when burning natural gas; however, periodic monitoring requirements have been included for these units if/when they burn distillate oil. The source is required to perform a monthly visual emissions observation when burning distillate oil. If such visual observation indicates any visible emissions, the source is required to take corrective action to eliminate the visible emissions. If such corrective action fails to eliminate the visible emissions, the source is required to conduct a Method 9 visible emissions evaluation. The source is required to maintain records of each visual emissions observation/visible emissions evaluation.

No periodic monitoring requirements for opacity have been included for units U104, U105, and U107. These units are small burners that burn only natural gas. It is not anticipated that these units will exceed the 20/30% new source opacity standard.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

(a) The annual throughput of distillate oil for the fuel burning equipment, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(b) The annual throughput of natural gas for the fuel burning equipment, calculated annually each calendar year for emissions reporting purposes.

(c) All fuel supplier certifications.

(d) Records of visual emissions observations, visible emissions evaluations, and any corrective action taken, as required by Condition 7.

Note: The recordkeeping in Condition 8b is required for emissions reporting purposes only. The permit does not contain an annual throughput limit for natural gas. The emissions contributions for units U100, U101, U102, and U103 have been calculated to account for the worst-case operating scenario for each pollutant (the use of distillate oil at the maximum throughput limit and natural gas for the remainder of the year, or the use of only natural gas for 8760 hours per year). These emissions contributions are included in the emission limits in Condition 4. As such, the source could not exceed the emission limits in Condition 4 by operating units U100, U101, U102, and U103 on natural gas, even if these units were operated for 8760 hours per year.

Testing

This section of the permit does not require source tests. Facility-wide testing requirements are outlined in Section V. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS - Process Equipment Requirements - (U16, U17, U19, U31, U33-U36, U38-U43, U45-U49, U53, U54, U100-U107, U121-U125, U127-U139)

Limitations

The following limitations are derived from the State Operating Permit issued May 19, 2009:

Condition 9 (SOP Condition 3): Emission Controls
Condition 10 (SOP Condition 4): Emission Controls
Condition 11 (SOP Condition 5): Emission Controls
Condition 12 (SOP Condition 6): Fugitive Dust and Fugitive Emission Controls
Condition 13 (SOP Condition 13): Throughput
Condition 14 (SOP Condition 14): Throughput
Condition 15 (SOP Condition 15): Throughput
Condition 16 (SOP Condition 16): Throughput
Condition 17 (SOP Condition 17): Throughput
Condition 18 (SOP Condition 18): Requirements by Reference
Condition 19 (SOP Condition 26): Visible Emission Limit for Non-NSPS Units
Condition 20 (SOP Condition 27): Visible Emission Limit for NSPS OOO Units
Condition 21 (SOP Condition 28): Visible Emission Limit for NSPS OOO Units
Condition 22 (SOP Condition 19): Process Emission Limits
Condition 23 (SOP Condition 20): Process Emission Limits for NSPS OOO Units
Condition 24 (SOP Condition 22): Process Emission Limits
Condition 25 (SOP Condition 23): Facility Wide Process Equipment Emission Limits
Condition 26 (SOP Condition 24): Hazardous Air Pollutants
Condition 27 (SOP Condition 25): Hazardous Air Pollutant Emission Limits

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-260	BACT Standard for New and Modified Stationary Sources
9 VAC 5-50-90	Standard for Fugitive Dust/Emissions
9 VAC 5-60-320	Standard for Toxic Pollutants
9 VAC 5-60-340	Emission Standards for Toxic Pollutants from New and Modified Sources: Submittal of Information
9 VAC 5-50-400	EPA New Source Performance Standards (General)
9 VAC 5-50-410	EPA New Source Performance Standards (Designated standards of performance)

The following Code of Federal Regulations has been determined to be applicable:

40 CFR 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants

Units U53 and U54 have been re-evaluated for applicability to NSPS OOO and units U124 and U125 have been re-evaluated for applicability to NSPS UUU and OOO.

Units U53 and U54 were determined to be applicable to NSPS OOO during the processing of the June 19, 2006 NSR permit. However, the source has asserted that because the ship unloading operation is not directly connected to the crushing operation, it is not an affected source under this subpart. NSPS OOO applies only to the following equipment units in a nonmetallic mineral processing plant: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. "Nonmetallic mineral processing plant" is defined in §60.671 as "any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670(b) and (c)." The EPA Applicability Determination Index (ADI) also contains two relevant determinations regarding applicability to NSPS OOO: one dated July 3, 1997 (Control No. 9800039), and one dated January 4, 2006 (Control No. 0800056) (both attached for reference). Both ADI entries point to the fact that equipment not directly related to the nonmetallic mineral production line are not affected sources under the NSPS. At the US Gypsum Norfolk Plant, gypsum ore is unloaded from ships and conveyed to various stockpiles. From the stockpiles, the gypsum ore is transferred via a separate conveyor system to the rock screening/crushing/feeding system. Thus, the ship unloading hopper (U54) and ship unloading conveyor system (U54) are not directly involved in the "nonmetallic mineral processing plant" itself. All references to NSPS OOO have been removed for these units.

Units U124 and U125 were also determined to be applicable to NSPS UUU in the June 19, 2006 NSR permit; however, these units are flash calcining hammer mills that serve to both grind the crushed gypsum material and to chemically remove the bonded water to produce stucco. NSPS UUU specifically exempts grinding equipment that also dries the process material (§60.730(b)). A similar determination was made by the Oregon Department of Environmental Quality for the flash calciner at the US Gypsum wallboard manufacturing facility in Rainier, Oregon in the Title V permit issued in July 2010 (the permit and Statement of Basis are attached for reference). All references to NSPS UUU have been removed from the permit.

While units U124 and U125 are not affected sources under NSPS UUU, it has been determined that they are subject to the requirements of NSPS OOO. Per §60.671, hammermills are affected sources under this subpart.

A table has been included in Condition 18 to clarify which units are subject to NSPS OOO. Additional information regarding the exhaust points for each of these units has also been included to help identify which of the opacity limits in Conditions 20 and 21 apply to each unit. A compliance inspection on June 19, 2014 indicated that the source was having some difficulty with these requirements.

Conditions 20, 21, and 23 have been revised to remove the language regarding initial startup and the initial performance test. These have been completed. These changes were made in response to comments from EPA Region III.

Condition 23 has been revised to only reference the NSPS OOO-applicable equipment units controlled by a dust collector not covered by the BACT limit in Condition 22. Units U121, U122, and U123 were included in the June 19, 2006 NSR permit and, therefore, are subject to the 0.01 gr/dscf BACT requirement in Condition 22. Units U16 and U36 were permitted prior to the June 19, 2006 NSR permit and are not covered by the more stringent limit. The NSPS OOO limit applies to these units.

Conditions 22 and 23 have been further revised to indicate how compliance with the limits shall be determined. Initial performance (stack) testing was conducted in September 2004 for unit U16 (which shares a stack with unit U36) and in June 2008 for the remaining NSPS OOO-applicable units. Both tests showed compliance with the respective gr/dscf limits. The permit and NSPS do not require any performance testing beyond this; however, the permit includes periodic monitoring requirements in Conditions 28, 29, and 30 which serve to ensure proper operation of the baghouses.

Conditions 25 and 27 have been revised to include a reference to the requirement to track the annual throughputs on a rolling 12-month basis (as required by Conditions 13, 14, 15, 16, and 17). This will help clarify the averaging time for the tons/yr limits and ensure compliance with the rolling 12-month throughput requirement. This change was made in response to comments from EPA Region III.

Streamlined Requirements

Because units U124 and U125 are not subject to NSPS UUU, Conditions 21 and 29 of the May 19, 2009 SOP have been streamlined out of the Title V permit. These conditions will be removed from the SOP the next time it is open.

Monitoring

The monitoring requirements for units U43 and U121-U139 are outlined in Conditions 28 and 29. The source is required to equip each fabric filter with a device to continuously measure the differential pressure drop across the filter. To ensure good performance of these devices, the course is required to observe the pressure drop monitors at least once per operating week. The source is required to maintain records of the monitoring device observations, which include:

(a) Date
(b) Time
(c) Observation description
(d) Observer's name
(e) The acceptable pressure drop range
(f) Any corrective action taken, including, but not limited to, a brief description of the corrective action and the date of completion.

Compliance Assurance Monitoring (CAM) requirements for units U121, U124, U125, U126, U127, U128, U129, U130, U135, U136, U137, and U139 are outlined in Conditions 30 through 37. Condition 30 outlines the CAM performance criteria (visible emissions) and the indicator range (presence or absence of visible emissions). Specific CAM requirements from 40 CFR Part 64 are outlined in Conditions 31 through 37.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

(a) The annual total throughput of raw material (gypsum rock and synthetic gypsum) for Emissions Units U36, U47, U48, U49, U53, and U54, each calculated monthly as the sum of each consecutive twelve (12) month period, to demonstrate compliance with Conditions 13, 14, 15, and 16. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(b) The annual throughput of moisture and mold resistant additive (MMR additive), calculated monthly as the sum of each consecutive twelve 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(c) Operation and control device monitoring records for the fabric filter dust collectors.

(d) Scheduled and unscheduled maintenance and operator training.

CAM recordkeeping requirements are outlined in Condition 39. The source is required to maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

Testing

This section of the permit does not require source tests. Facility-wide testing requirements are outlined in Section V. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

CAM reporting requirements are outlined in Condition 40. The source is required to submit CAM reports as part of the Title V semi-annual monitoring report.

EMISSION UNIT APPLICABLE REQUIREMENTS - Facility Wide Conditions

Testing

The emissions testing condition from the May 19, 2009 SOP (Condition 31 of the SOP) has been included in Condition 41. Additional facility-wide testing requirements are included in Condition 42.

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

46-51. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

This general condition cite(s) the Article(s) that follow(s):
Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80	Application
9 VAC 5-80-140	Permit Shield
9 VAC 5-80-150	Action on Permit Applications

57. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41	Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50	Notification, Records and Reporting
9 VAC 5-50-50	Notification, Records and Reporting

61. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50	Applicability, Federal Operating Permit for Stationary Sources
9 VAC 5-80-190	Changes to Permits
9 VAC 5-80-260	Enforcement
9 VAC 5-80-1100	Applicability, Permits for New and Modified Stationary Sources
9 VAC 5-80-1605	Applicability, Permits for Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000	Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

73-76. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Conditions 73-76 and General Condition 57. For further explanation see the comments on general condition 57.

This general condition cites the sections that follow:

9 VAC 5-20-180	Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-110	Permit Content

80. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains the citations from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M	National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M	National Emissions Standards for Asbestos as it applies to insulating materials.
40 CFR 61.150, NESHAP Subpart M	National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70	Designated Emissions Standards
9 VAC 5-80-110	Permit Content

Streamlined Requirements

The *Fugitive Dust Emission Standards* General Condition has been streamlined out. These requirements are covered in Condition 12 of the permit.

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State:

9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions

9 VAC 5 Chapter 60, Part II, Article 5: Emission Standards for Toxic Pollutants from New and Modified Sources

INAPPLICABLE REQUIREMENTS

Citation	Title of Citation	Description of Applicability
40 CFR 63, Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	The source operates one natural gas-fired hot water boiler (U107). Per §63.11195(e), gas-fired boilers are not subject to this subpart.

After July 1, 2011, sources that emit or have the potential to emit 100,000 tpy CO_2e and 100 tpy of greenhouse gases on a mass basis are required to have a Title V permit even if they are not Title V major for any criteria pollutant or HAP. Additionally, any source that increases their CO_2e emissions more than 75,000 tpy as a result of a modification is required to address their CO_2e emissions as part of the Title V permit.

The United States Gypsum Company - Norfolk Plant is not currently subject to GHG regulations. There are no applicable GHG permitting requirements for this source.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
U17	Diesel Tank (1,000 gallons)	9 VAC 5-80-720B	VOC	
U18	Anhydrite System (15 tons/hr)	9 VAC 5-80-720B	PM-10	
U19	Gasoline Tank (1,000 gallons)	9 VAC 5-80-720B	VOC	
U38	#4 fuel oil tank to store #2 fuel oil (30,000 gallons)	9 VAC 5-80-720B	VOC	
U39	#2 fuel oil tank (15,000 gallons)	9 VAC 5-80-720B	VOC	
U40	West waste oil tank (2,500 gallons)	9 VAC 5-80-720B	VOC	
U41	East waste oil tank (2,500 gallons)	9 VAC 5-80-720B	VOC	
U42	Paved roads (road traffic)	9 VAC 5-80-720B	N/A	
PW1	Aqueous parts washer	9 VAC 5-80-720B	VOC	
VAC1	Housekeeping vacuum system (vents inside building)	9 VAC 5-80-720B	PM-10	

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

Changes to the Insignificant Emissions Unit List:

PW1 (aqueous parts washer) has been added. This unit is water-based and is not subject to the requirements of Existing Source Rule 4-24 (Emission Standards For Solvent Metal Cleaning Operations Using Non-Halogenated Solvents).

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the **Virginian-Pilot newspaper** from **Tuesday, September 9, 2014** to **Thursday, October 9, 2014**.